Kathleen M. Wilbur, Director

January 29, 2001

The Honorable Loren Bennett Senate Regulatory Subcommittee Michigan State Senate P.O. Box 30036 Lansing, Michigan 48909

Dear Senator Bennett:

Pursuant to Section 322 of P.A. 293 of 2000, enclosed is the Occupational Injuries, Illnesses and Fatalities in Michigan report as prepared by the Department of Consumer and Industry Services, Bureau of Safety and Regulation.

This notification may also be viewed on our web site at the following address: http://www.cis.state.mi.us/fast/leg_rep.htm. If you have any questions regarding this information, please feel free to contact me at 373-3892.

Sincerely,

John R. Suckow, C.P.A.

Director, Finance and Administrative Services

JRS:hab

C: Senate Regulatory Subcommittee

Kathleen M. Wilbur

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G. Mennen Williams Building P.O. Box 30004 Lansing, Michigan 48909-7504 517-373-1820

Department of Consumer & Industry Services Kathleen M. Wilbur, Director

January 29, 2000

The Honorable Marc Shulman, Chairman House Consumer and Industry Services Subcommittee Michigan House of Representatives P.O. Box 30014 Lansing, Michigan 48909

Dear Representative Godchaux:

Pursuant to Section 322 of P.A. 293 of 2000, enclosed is the Occupational Injuries, Illnesses and Fatalities in Michigan report as prepared by the Department of Consumer and Industry Services, Bureau of Safety and Regulation.

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REPORT TO THE LEGISLATURE OCCUPATIONAL INJURIES, ILLNESSES AND FATALITIES IN MICHIGAN

Developed by the Bureau of Safety and Regulation Michigan Department of Consumer and Industry Services

February 2001

MICHIGAN OCCUPATIONAL INJURIES, ILLNESSES AND FATALITIES

February 2001

INTRODUCTION

The information that follows is presented in response to Section 322 of Public Act 293 of 2000. This section requires that the Department of Consumer and Industry Services, Bureau of Safety and Regulation, provide an annual report by February 1 of each year "... to the appropriate house and senate appropriations subcommittees and the fiscal agencies on the number of individuals killed and the number of individuals injured on the job within industries regulated by the bureau during the preceding calendar year."

"PROGRAM-RELATED" FATALITIES

The bureau records "program-related" fatalities. In general this means that the incident related to the fatality may have resulted from a hazard or hazards that occurred based upon a failure to adhere to one or more Michigan Occupational Safety and Health Act (MIOSHA) requirements. There were 59 such fatalities in Michigan during calendar year 2000. (See following table for data and definitions.)

WORKPLACE INJURIES AND ILLNESSES

A complete census of occupational illnesses and injuries for Michigan does not exist. However, the bureau cooperates with the U.S. Bureau of Labor Statistics to sample Michigan's employers to produce annual estimates of the number of occurrences of work-related illness and injuries. The 2000 survey collected the 1999 illness and injury occurrences of 7,390 Michigan employers of which 5,934 were usable for estimation. The employer sample was stratified by industry and the results were used to project total occurrence estimates. The five-page table that follows the fatality data presents the results. Footnotes at the end of the table provide additional information about the methodology used. The sample excludes self-employed individuals, railroads, selected mining industries and the federal government.

INQUIRIES

Questions about these data may be directed to the MIOSHA Information Division, Bureau of Safety and Regulation, telephone (517) 322-1851.

MIOSHA Program-Related Fatalities Calendar Year 2000

Occupational Health	2
General Industry	34
Construction	23
TOTAL	59*

^{*}Data is current as of 1/11/01.

Source:

MIOSHA Information Division,

Bureau of Safety and Regulation

Michigan Department of Consumer and Industry Services

NOTE: A fatality is recorded as "program-related" if it appears to be related to one or more of the following conditions:

- 1. The incident was found to have resulted from violations of MIOSHA safety and health standards or the general duty clause.
- 2. The incident was considered to be the result of a failure to follow a good safety and health practice that would be the subject of a safety and health recommendation.
- 3. The information describing the incident is insufficient to make a clear distinction between a "program-related" and "non-program-related" incident, but the type and nature of the injury indicate that there is a high probability that the injury was a result of a failure to adhere to one or more MIOSHA standards, the general duty clause, or good safety and health practice.

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999

(In thousands)			lr	njuries an	d Illnesse:	5		Inju	ries				
	SIC	1999 Annual average		Lost w	orkday ses	Cases		Lost w	•	Cases			
Industry ¹	code ² employ- ment ³ (000's)	ment ³	code ² employ- ment ³	code ² employ- ment ³	code ² employ- ment ³	Total cases	Total ⁴	With days away from work ⁵	without lost work- days	Total cases	Total⁴	With days away from work ⁵	without lost work- days
All Industries including State and local government ⁶		4,443.7	296.7	144.5	68.4	152.2	259.3	128.3	61.7	131.1			
Private Industry ^e		3,893.6	269.7	130.6	59.5	139.1	234.1	115.1	53.5	118.9			
Agriculture, forestry, and fishing		45.0	3.1	1.5	1.0	1.6	2.8	1.4	0.9	1.4			
Agricultural production ^s Agricultural services	01-02 07								*				
Mining ⁷		7.2	0.5	0.3	0.2	0.2	0.5	0.2	0.1				
Construction		193.9	14.4	6.3	5.1	8.1	13.9	6.0	4.8	7.9			
General building contractors Residential building construction Nonresidential building construction Heavy construction, except building Heavy construction, except highway Special trade contractors Plumbing, heating, air-conditioning Electrical work Masonry, stonework, and plastering Carpentry and floor work Roofing, siding, and sheet metal work Concrete work Miscellaneous special trade contractors	152 152 154 162 162 173 174 175 176 177	26.2 17.2 15.0 10.7 135.2 30.9 26.9 14.8 14.8 12.0 7.7	1.1 1.5 1.6 1.3 1.2 10.2 2.4 2.6 2.6 2.6 3.1.7 0.8	0.00 0.00 0.00 4.00 0.00 0.00 0.00 0.00	4 0.4 5 0.5 7 0.6 6 0.5 7 0.5 8 0.6 6 0.4 4 0.4	0.7 0.8 0.9 0.7 5.7 5.7 5.7 5.7 5.7 6.9 1.0 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9	0.9 1.4 7 1.5 7 10.0 7 2.2 2.2 2.5 1.0 6 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	0.3 0.6 0.7 0.6 0.6 0.6 0.8 0.6 0.8 0.6 0.5 0.4 0.4 0.4 0.4 0.4	0.3 0.5 0.5 0.5 0.5 0.6 0.4 0.4 0.4	0.6 0.8 0.8 0.6 5.6 1.7 6 1.1 0.5 4 0.6 0.3			
Manufacturing		975.	2 134.	63.	6 22.3	70.	В 104.0	51.3		1			
Durable goods		741.	В 110.	49.	2 16.	5 60.	8 85.	39.7	7 13.9				
Lumber and wood products Millwork, plywood and structural members Furniture and fixtures Office furniture Partitions and fixtures Wood partitions and fixtures Stone, clay, and glass products Products of purchased glass Concrete, gypsum, and plaster products Primary metal industries Blast furnace and basic steel products Blast furnaces and steel mills Iron and steel foundries Gray and ductile iron foundries Nonferrous foundries (castings) Fabricated metal products Cutlery, handtools, and hardware Hardware, n.e.c. Fabricated structural metal products Sheet metal work Screw machine products, bolts, etc.	33 331 332 332 33 342 342 342	3 6. 43. 2 21. 4 4. 2 21. 3 8. 7 6. 3 37. 1 11. 2 10. 11 7. 16 7. 16 129 4. 16 15	8 1. 7. 0. 0. 5. 1. 0. 0. 5. 1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	0 0 0 3 3 2 1 1 0 0 0 3 3 5 5 1 1 0 0 0 3 3 3 1 0 0 0 0 0 0 0 0 0 0 0	6 0.7 1. 0. 9. 0. 0. 4 0. 1. 0. 6. 0. 4 1. 6. 0. 4 1. 6. 0. 0. 4 3 0 0. 6. 4 3 0 0. 5 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0 0. 5 0. 5 0. 5 0 0. 5 0 0. 5 0 0. 5 0. 5 0. 5 0. 5 0. 5 0. 5 0. 5 0. 5 0. 5 0. 5 0.	3 0. 3. 3. 1. 3. 2. 3. 1. 5. 1. 0. 3. 3. 0. 3. 3. 2. 2. 2. 6. 4. 2. 3. 2. 2. 2. 5. 1. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	3 0. 3 1. 3 0. 5. 1. 3 0. 2 2. 4 0. 1. 6 6. 9 1. 1. 20 0. 1. 20 0. 1. 20 0. 1. 20 0. 1. 20 0. 20 0.	9 0.6 6 2.9 7 0.1 9 0.5 5 0.2 2 1.6 8 0.0 0.3 3 0.0 5 7 0.0 1.7 2 0.0 1.7 0.0 0.0 1.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 9	3 0.3 0 2.7 2 1.0 2 0.2 1 0.2 5 1.2 1 0.4 3 0.6 3 0.8 1 0.6 5 1.3 4 0.9			

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999 -- Continued

thousands)			li	njuries an	d Illnesse	s	Injuries					
	810	1999 Annual average			orkday ses	Cases		Lost we		Cases		
Industry ¹	SIC code ²	employ- ment ³ (000's)	de ² employ- ment ³	ment ³	Total cases	Total⁴	With days away from work ⁵	without lost work- days	Total cases	Total⁴	With days away from work ⁵	without lost work- days
Screw machine products Bolts, nuts, rivets, and washers Metal forgings and stampings Automotive stampings Metal services, n.e.c. Plating and polishing Metal coating and allied services Miscellaneous fabricated metal products Industrial machinery and equipment Construction and related machinery Metalworking machinery Machine tools, metal cutting types Special dies, tools, jigs and fixtures Machine tool accessories Special industry machinery General industrial machinery Industrial machinery, n.e.c. Carburetors, pistons, rings, valves Industrial machinery, n.e.c. Electronic and other electric equipment Household appliances Electronic components and accessories Miscellaneous electrical equipment and supplies Transportation equipment Motor vehicles and equipment Motor vehicles and car bodies Motor vehicle parts and accessories Instruments and related products Measuring and controlling devices Medical instruments and supplies Miscellaneous manufacturing industries Nondurable goods Food and kindred products Meat products Dairy products Preserved fruits and vegetables Grain mill products Bakery products Beverages	20 20 20 20 20 20	14.6 7.5 7.1 16.6 132.4 9.7 64.0 7.1 35.0 10.3 12.4 28.0 6.1 18.3 35.1 14.4 16.8 14.4 16.8 14.4 16.8 16.9 17.1 18.8 18.8 18.8 19.7 19.7 19.7 19.7 19.7 19.7 19.7 19.7	1.5 13.0 11.6 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	0.7 5.4 4.8 1.2 0.7 0.8 1.7 7.8 0.0 0.0 0.0 1.1 1.0 0.0 0.0 1.1 1.0 0.0 0	work ⁵ 0.2 0.3 1.2 0.3 1.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.8 7.6 6.8 0.3 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 1.0 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0	1.5 11.5 10.2 1.7 0.9 0.9 1.8 13.3 1.6 1.6 1.7 0.7 1.6 1.6 1.7 0.7 1.6 1.6 1.7 0.7 0.7 1.6 1.6 1.7 0.7 0.7 1.6 1.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0	4.8 4.3 1.0 0.6 0.4 1.0 0.5 1.7 0.5 1.7 0.5 1.7 0.5 1.7 0.5 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	0.2 0.3 1.1 0.9 0.3 0.1 0.4 3.0 0.2 1.5 0.2 0.3 0.1 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.8 6.7 5.9 0.7 0.3 0.4 0.6 6.4 0.6 3.0 0.2 2.0 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0		
Apparel and other textile products Miscellaneous fabricated textile products Automotive and apparel trimmings Paper and allied products Paper mills Paperboard containers and boxes Printing and publishing	23 23 2 2	39 19 96 17 26 20 62 4 65 7	0.8 7.1 0.2 1.9 7.3	3.5 3.4 .9 3.3 1.0 2.7	2.2 2.1 1.1 0.1 0.7 1.5	0.5 0.4 0.5 0.1 0.2 0.9 0.3	.4 2 .3 1 .8 1 .2 0 .3 0 .3 0	.9 1 .8 1 .3 0 .9 0 2.3 1	.1 0 .1 0 .1 0 .7 0 .3 0	0.3 0 0.2 0 0.4 0 0.1 0 0.2 0 0.8 1 0.3 0		
Newspapers Books Commercial printing	2	73	5.0	0.4	0.3	0.1	0.2).4 C	.2 (0.1 0.3		

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999 -- Continued

			ir	juries and	d Ilinesses	· _		Inju	ries	
	SIC	1999 Annual average		Lost w		Cases		Lost we	· · · · ·	Cases without
Industry ¹	code ²	employ- ment ³ (000's)	Total cases	Total⁴	With days away from work ⁵	without lost work- days	Total cases	Total⁴	With days away from work ⁵	lost work- days
Commercial printing, lithographic	2752	12.7	0.7	0.5	0.2	0.3		0.4	0.2	0.3
Chemicals and allied products	28	43.5				1.2	1.9	1.1	0.4	0.0
Plastics materials and synthetics	282	6.1	0.3	0.2		0.1		0.1		•
Drugs	283	14.0	0.9	0.3	0.2	0.6	0.6		0.1	0.
Pharmaceutical preparations	2834	13.2		0.2		0.5	0.5		0.1	0.
Rubber and miscellaneous plastics products	30	62.8	8.4	5.0	2.1	3.4	6.9		1.5	
Miscellaneous plastics products, n.e.c.	308					2.9	6.1			
Plastics products, n.e.c.	3089		1		1.4	2.2	4.7	2.8	1.0	1.
ransportation and public utilities ⁷		170.6	16.2	9.9	5.2	6.3	15.8	9.7	5.0	6.
m u literan antakinan?	40		0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.
Railroad transportation7	41				1	1			0.5	0
Local and interurban passenger transit	42					1			1.9	2
Trucking and warehousing	45	32.7			1				1.3	1
Transportation by air	47	16.4			1		1		0.4	0
Transportation services	48			1		l .	1	L	0.3	0
Communications	49		1			1	1	1		1 1
Electric, gas, and sanitary services	49	32.3								1
Wholesale and retail trade		1,056.4	55.6	26.5		1	l			Į
Wholesale trade		234.5	19.3	9.4	5.4	9.9	18.2	1		[
Wholesale tradedurable goods	50	155.	1 12.2	5.2	3.2	7.0		1	1	
Wholesale tradenondurable goods	51	79.	4 7.1	4.2	2 2.2	2.9			1	
Retail trade		822.	36.4	17.	1 8.7	19.3	35.6	1		1
Building materials and garden supplies	5:	2 40.	9 3.:	1.1	7 0.9	1.5			7 0.8	
Lumber and other building materials	52	-							-	- 9
Hardware stores	52			3 O.	4 0.:	2 0.3				
General merchandise stores	5			5.5	9 2.0					
Food stores	5		6 4.	1.	9 1.:					
Grocery stores	54	1 88.	7 4.	3 1.	8 1.	1 2.				
Automotive dealers and service stations	5			5 1.	9 1.	1 2.				
New and used car dealers	55	-1	,		9 0.	5 1.5				
Gasoline service stations	55		7 1.	ol 0.	5 0.	2 0.				
Apparel and accessory stores	5		5 0.	8 0.	3 0.					
Furniture and homefurnishings stores	5				.8 0.	5 0.				
		8 287		5 3.	3 2.	o 7.		4 3.		
Eating and drinking places Miscellaneous retail		9 101				9 1.	4 2.	5 1.:	2 0.	8
				1		2 1.	3 2.	7 1.	6 1.	1
Finance, insurance, and real estate		201	1			1]		1	
Depository institutions		62 63 63			.3 0. .4 0.			5 0.	3 0.	2
Insurance carriers		5 39			.9 0		-			6
Real estate	'			1				.9 19.	8 9.	5 2
Services		1,197	1	İ					1	1
Hotels and other lodging places	1 7	70 37	.4 2	.8 1	.2 0	.5 1	.6 2.	.7 1.	.∠ ^{0.}	3

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999 -- Continued

			lr	njuries and	d Illnesse:	s		Injur	ies	
	SIC	1999 Annual average		Lost w	-	Cases		Lost we	•	Cases
industry ¹	code ²	employ- ment ³ (000's)	Total cases	Totai⁴	With days away from work ⁵	without lost work- days	Total cases	Total ⁴	With days away from work ⁵	without lost work- days
Personal services	72	44.0	0.9	0.6	0.3	0.4	0.9	0.5	0.3	0.4
Laundry, cleaning, and garment services	721	15.3	0.8	0.5	0.2	0.3	0.7	0.4	0.2	0.3
Auto repair, services, and parking	75	40.2	2.1	0.9	0.5	1.2	2.1	0.9	0.5	1.2
Automotive repair shops	753	23.4	1.1	0.5	0.2	0.6	1.1	0.5	0.2	0.6
Automotive services, except repair	754	10.4	0.6	0.3	0.3	0.3	0.6	0.3	0.3	0.2
Miscellaneous repair services	76	13.7	1.0	0.5	0.2	0.5	1.0	0.5	0.2	0.5
Amusement and recreation services	79	56.1	2.4	1.3	0.6	1.1	2.1	1.2	0.6	1.0
Health services	80				4.2		15.9	8.7	4.0	7.2
Nursing and personal care facilities	805						5.1	3.4	1.3	1.7
Hospitals	806		10.0			5.0	9.0	4.7		4.3
Educational services	82					0.4	0.6	0.2	0.2	0.4
Colleges and universities	822				0.1		0.4	0.1	0.1	0.3
Social services	83				1.2		ľ	2.1	1.2	2.1
									8.2	12.1
State and local government		550.1	27.0	Ì						
State government		139.1	6.0	3.4	2.1	2.6	5.4	3.1	1.9	2.2
Services		90.4	3.2	1.8	0.9	1.4	2.9	1.6	8.0	1.2
Educational services	82	65.5	1.8	0.9	0.4	0.9	1.5	0.8	0.4	0.7
Social services	83					0.3	0.4	0.2	0.1	0.2
		48.7		1.6	1.2	1.2	2.5	1.5	1.1	1.0
Public administration								l		
Justice, public order, and safety	92								0.8	1
Administration of human resources	94	8.9	0.2	1	L.	0.1		0.1		0.1
Administration of economic programs	96	6.6	0.3	0.1	0.1	0.2	0.3	0.1	0.1	0.1
Local government		411.0	21.0	10.5	6.8	10.4	19.9	10.0	6.3	9.9
Construction		5.6	0.8	0.4	0.3	0.5	0.7	0.3	0.2	0.4
Services		269.4	10.5	4.9	3.1	5.5	10.1	4.7	2.9	5.4
Nursing and personal care facilities	809	5.6	0.9	0.7	0.5	0.2	0.9		1	
Hospitals	80					4	1.0			
Educational services	8:			1	4					L .
Elementary and secondary schools	82	4	1	t .		4.6	7.7	3.2	2.0	4.
Ciementary and secondary schools	1 32	·I	1	1	1 -	1	ı	1	1	1

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999 - Continued

(in thousands)

Michigan

			1	njuries an	d Illnesse	s .	Injuries				
Industry ¹	SIC code ²	1999 Annual average employ- ment ³ (000's)		Lost wo		Cases		Lost workday cases		Cases	
			Total cases	Total ⁴	With days away from work ⁵	without lost work- days	Total cases	Total⁴	With days away from work ⁵	without lost work- days	
Public administration Executive, legislative, and general Administration of human resources	91 94	132.3 119.3 7.7		4.5	2.9	3.9	8.0		2.7	3.8	

¹ Totals include data for industries not shown separately.

mining contractors are excluded from the coal, metal, and nonmetal mining industries.

NOTE: Because of rounding, components may not add to totals. n.e.c. = not elsewhere classified.

-- Indicates data not available.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

² Standard Industrial Classification Manual, 1987 Edition.

³ Employment is expressed as an annual average and is derived primarily from the BLS-\$tate Covered Employment and Wages program.

⁴ Total lost workday cases involve days away from work, or days of restricted work activity, or both.

⁵ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

⁶ Excludes farms with fewer than 11 employees.

⁷ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent

Fewer than 50 cases.

D.C.I.S.-F.A.S.B. 2001 JAN 18 PM 2: 35

BUREAU OF SAFETY

LATION

NDUM

Date:

January 16, 2001

To:

Kalmin D. Smith, Ph(D)

From:

Douglas R. Earle

Subject:

Legislative Report

Section 322 of the '01 budget boilerplate requires that by February 1 a report be provided to the appropriate house and senate appropriations subcommittees and the fiscal agencies "on the number of individuals killed and the number of individuals injured on the job within industries regulated by the bureau during the preceding calendar year."

Attached is the report that includes the 2000 "program-related" fatality counts and the number of occupational injuries and illnesses by industry projected from the 1999 U.S. Bureau of Labor Statistics (BLS) survey. As you know, employers are not required to report all occupational injuries and illnesses. Therefore, the data that most closely approximate "individuals injured" are the data from the survey that was conducted during 2000 and reports 1999 illnesses and injuries.

Call me if you have questions or need additional information.

Attachment

cc:

John Suckow

Don Reichle

Deborah Grether

Doug Kalinowski

REPORT TO THE LEGISLATURE OCCUPATIONAL INJURIES, ILLNESSES AND FATALITIES IN MICHIGAN

Developed by the Bureau of Safety and Regulation Michigan Department of Consumer and Industry Services

February 2001

MICHIGAN OCCUPATIONAL INJURIES, ILLNESSES AND FATALITIES

February 2001

INTRODUCTION

The information that follows is presented in response to Section 322 of Public Act 293 of 2000. This section requires that the Department of Consumer and Industry Services, Bureau of Safety and Regulation, provide an annual report by February 1 of each year "... to the appropriate house and senate appropriations subcommittees and the fiscal agencies on the number of individuals killed and the number of individuals injured on the job within industries regulated by the bureau during the preceding calendar year."

"PROGRAM-RELATED" FATALITIES

The bureau records "program-related" fatalities. In general this means that the incident related to the fatality may have resulted from a hazard or hazards that occurred based upon a failure to adhere to one or more Michigan Occupational Safety and Health Act (MIOSHA) requirements. There were 59 such fatalities in Michigan during calendar year 2000. (See following table for data and definitions.)

WORKPLACE INJURIES AND ILLNESSES

A complete census of occupational illnesses and injuries for Michigan does not exist. However, the bureau cooperates with the U.S. Bureau of Labor Statistics to sample Michigan's employers to produce annual estimates of the number of occurrences of work-related illness and injuries. The 2000 survey collected the 1999 illness and injury occurrences of 7,390 Michigan employers of which 5,934 were usable for estimation. The employer sample was stratified by industry and the results were used to project total occurrence estimates. The five-page table that follows the fatality data presents the results. Footnotes at the end of the table provide additional information about the methodology used. The sample excludes self-employed individuals, railroads, selected mining industries and the federal government.

INQUIRIES

Questions about these data may be directed to the MIOSHA Information Division, Bureau of Safety and Regulation, telephone (517) 322-1851.

MIOSHA Program-Related Fatalities Calendar Year 2000

Occupational Health	2
General Industry	34
Construction	23
TOTAL	5 9*

^{*}Data is current as of 1/11/01.

Source:

MIOSHA Information Division,

Bureau of Safety and Regulation

Michigan Department of Consumer and Industry Services

NOTE: A fatality is recorded as "program-related" if it appears to be related to one or more of the following conditions:

- 1. The incident was found to have resulted from violations of MIOSHA safety and health standards or the general duty clause.
- 2. The incident was considered to be the result of a failure to follow a good safety and health practice that would be the subject of a safety and health recommendation.
- 3. The information describing the incident is insufficient to make a clear distinction between a "program-related" and "non-program-related" incident, but the type and nature of the injury indicate that there is a high probability that the injury was a result of a failure to adhere to one or more MIOSHA standards, the general duty clause, or good safety and health practice.

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999

(In thousands)			lı	njuries an	d Illnesse	s		Inju	ries	
	SIC	1999 Annual average			orkday ses	Cases		Lost w		Cases without
Industry ¹	code ²		Total cases	Total⁴	With days away from work ⁵	without lost work- days	Total cases	Totai⁴	With days away from work ⁵	without lost work- days
All Industries including State and local government		4,443.7	296.7	144.5	68.4	152.2	259.3	128.3	61.7	131.1
Private Industry		3,893.6	269.7	130.6	59.5	139.1	234.1	115.1	53.5	118.9
Agriculture, forestry, and fishing	,	45.0	3.1	1.5	1.0	1.6	2.8	1.4	0.9	1.4
Agricultural production ⁶ Agricultural services	01-02 07									
Mining ⁷		7.2	0.5	0.3	0.2	0.2	0.5	0.2	0.1	0.2
Construction		193.9	14.4	6.3	5.1	8.1	13.9	6.0	ļ	İ
General building contractors Residential building construction Nonresidential building construction Heavy construction, except building Heavy construction, except highway Special trade contractors Plumbing, heating, air-conditioning Electrical work Masonry, stonework, and plastering Carpentry and floor work Roofing, siding, and sheet metal work Concrete work Miscellaneous special trade contractors	152 152 154 16 163 17 17 17 17 17 17 17	26.2 17.2 15.0 10.1 135.2 136.2 14.1 14.1 14.1 15.1 16.1 17.1 18.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1 19.1	2 1.5 7 1.5 9 2.6 9 2.6 8 1.7 7 0.	0.4 0.3 0.4 4.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	4 0.4 5 0.5 7 0.0 6 0.5 7 0.1 8 0.0 6 0.1 4 0.4 5 0.5	0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	7 0.9 1.4 7 1.5 7 10.0 7 2.3 2 2.0 5 1.0 6 1.0	0.3 1.4 0.6 0.7 0.6 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	0.6 0.8 0.8 0.6 0.6 5.6 5.6 1.7 1.1 0.5 4 0.6 3 0.3 0.3
Manufacturing		975.	2 134.	4 63.	6 22.	3 70.		1		1
Durable goods		741.	8 110.	0 49.	.2 16.	5 60.	8 85.	3 39.		
Lumber and wood products Millwork, plywood and structural members Furniture and fixtures Office furniture Partitions and fixtures Wood partitions and fixtures Stone, clay, and glass products Products of purchased glass Concrete, gypsum, and plaster products Primary metal industries Blast furnace and basic steel products Blast furnaces and steel mills Iron and steel foundries Gray and ductile iron foundries Nonferrous foundries (castings) Fabricated metal products Cutlery, handtools, and hardware Hardware, n.e.c. Fabricated structural metal products Sheet metal work Screw machine products, bolts, etc.	24 25 25 25 32 32 33 33 33 33 33 33 33 33 33 33	5 43. 2 21. 4 4 4 11 2 21. 23 8 6. 27 6. 23 10. 21 7. 22 10. 24 10. 24 10. 25 29 44 16. 44 5.	8 1.7 0 0 5.5 1 0 2 2 1 1 7 1 3 6 3 3 5 8 5 1 1 2 2 2 0 0 1 1 1 2 2 2 0 0 1 1 1 1 1	0 0 33 1 0 0 3 5 1 0 0 3 5 5 1 1 0 0 0 3 6 1 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.6 0.7 1 .0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 0.3 3 2.3 1 0.0 1 5.5 1 0.0 1 0.0 3 3 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.0 1 0.	3 0.3 3 1.3 3 0.0 2 2.4 4 0.0 5 6 6 9 1 1 20 0.7 1.1 20 0.3 0.3 0.3 0.9	9 0. 66 7. 9 0. 5 0. 5 1. 8 0. 9 0. 4 3 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 0. 9 8 7 0. 0 0. 0 0. 4 4 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 0.3 0 2.7 2 1.0 2 0.2 1 0.2 5 1.2

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999 -- Continued

(In thousands)			1:	niuries an	nd Illnesse	s		Inju	ries						
		1999 Annual		Lost w	vorkday ses	Cases		Lost we	•	Cases					
Industry ¹	SIC code ²		code ² employ- ment ³	code ² employ- ment ³	code ² employ- ment ³	ode ² employ- ment ³	employ- ment ³	Total cases	Total⁴	With days away from work ⁵	without lost work- days	Total cases	Total ⁴	With days away from work ⁵	without lost work- days
Screw machine products Bolts, nuts, rivets, and washers Metal forgings and stampings Automotive stampings Metal services, n.e.c. Plating and polishing Metal coating and allied services Miscellaneous fabricated metal products Industrial machinery and equipment Construction and related machinery Metalvorking machinery Machine tools, metal cutting types Special dies, tools, ligs and fixtures Machine tool accessories Special industry machinery Industrial machinery Industrial machinery, n.e.c. Carburetors, pistons, rings, valves Industrial machinery, n.e.c. Electronic and other electric equipment Household appliances Electronic components and accessories Miscellaneous electrical equipment Motor vehicles and equipment Motor vehicles and equipment Motor vehicles and car bodies Motor vehicle parts and accessories Instruments and related products Measuring and controlling devices Medical instruments and supplies Miscellaneous manufacturing industries Nondurable goods Food and kindred products Meat products Dairy products Preserved fruits and vegetables Grain mill products Bakery products Bakery products Beverages Apparel and other textile products Miscellaneous fabricated textile products Automotive and apparel trimmings Paper and allied products Paper mills Paperboard containers and boxes Printing and publishing Newspapers Books Commercial printing	26 26 27 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	60.4 54.4 14.6 7.5 7.1 16.6 132.4 9.7 35.0 10.3 7.3 12. 28. 6. 18. 35. 19. 29. 11. 14. 14. 15. 16. 17. 18. 18. 18. 19. 19. 10. 10. 10. 10. 10. 10. 10. 10	1.5. 13.0. 13.0. 13.0. 14.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 15.0. 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3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 2. 9. 4. 3. 3. 2. 9. 4. 3. 3. 2. 2. 9. 4. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	0.8 7.6 6.8 0.3 0.5 1.0 0.5 1.0 0.5 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	4.8 4.3 1.0 0.6 0.4 1.0 0.5 1.7 0.5 1.7 0.5 1.7 0.5 1.7 0.5 1.7 0.5 1.7 0.6 0.6 0.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1	0.3 1.1 0.3 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	0.8 6.7 5.9 0.7 0.3 0.4 0.8 6.4 0.6 3.0 0.2 2.0 0.3 0.8 1.2 0.2 0.9 1.3 0.2 0.9 1.3 0.2 0.2 1.3 0.2 0.2 1.3 0.2 0.2 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3					

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999 - Continued

ousands)			1	njurie	es and I	linesses			<u> </u>	njuries				
		1999 Annual average		Lo	ost worl		Cases			t work		Cases without		
Industry ¹	SIC code ²	e ² employ-	de ² employ- ment ³	ment ³	Total cases	То	otai ⁴	With days away from work ⁵	without lost work- days	Total cases	Tota	114	With days away from work ⁵	lost work- days
	0750	12.7	0.	,	0.5	0.2	0.3		'1	0.4	0.2	0.3		
Commercial printing, lithographic	2752 28				1.2	0.5	1.2	1.	9	1.1	0.4	0.		
Chemicals and allied products	282		1 .	3	0.2		0.1	١ _	-	0.1	0.1	0.		
Plastics materials and synthetics	283				0.3	0.2	0.6		-	0.2	0.1	ŏ		
Drugs Pharmaceutical preparations	2834				0.2	0.1 2.1	0.5 3.4	l .	9	4.0	1.5	2		
Rubber and miscellaneous plastics products	30	1			5.0 4.3	1.8	1 .		.1	3.5	1.4			
Miscellaneous plastics products, n.e.c.	3089				3.5	1.4	1		.7	2.8	1.0	1		
Plastics products, n.e.c.		170.		1	9.9	5.2	6.3	15	.8	9.7	5.0	6		
ransportation and public utilities ⁷		İ	1	-		0.1		ا ا	.2	0.2	0.1	0		
Railroad transportation7	40			.2 .0	0.2	0.5	I .	1 .	.0	0.6	0.5	C		
Local and interurban passenger transit	4		-1	.el	2.7	2.0	1	3 4	1.8	2.6	1.9			
Trucking and warehousing	4		-1	.5	3.1	1.4	4 1.4	.1	1.4	3.0	1.3 0.4			
Transportation by air	4	- 1		.6	1.1	0.4		~l :	.6	1.1	0.4			
Transportation services Communications	4	8 31.	-	.2	0.8	0.3		1 .	2.3	1.2	0.6			
Electric, gas, and sanitary services	4	9 32	3 2	.4	1.3	0.0	5 1.	'l '						
Wholesale and retail trade		1,056	.4 55	5.6	26.5	14.	1 29.	2 5	3.8	25.2	13.3	2		
		234	.5 19	9.3	9.4	5.	4 9.	9 1	8.2	8.7	5.0	9 9		
Wholesale trade		0 155	İ	2.2	5.2	3.	2 7	.0 1	1.4	4.7	3.0			
Wholesale tradedurable goods	j		1					.9	6.8	4.0	2.0			
Wholesale tradenondurable goods	5	51 79		7.1	4.2]			5.6	16.5	8.3	3 1		
Retail trade		822	2.0 3	6.4	17.1	8	.7 19	``	-		0.8	}		
Building materials and garden supplies		52 40		3.2	1.7	1 -	1	.5	3.1 1.9	1.7	0.0	B 		
Lumber and other building materials				2.0	1.1		•-1).9).3	0.7	0.4	0.:	2		
Hardware stores				0.8	0.4 5.9	1		2.4	8.1	5.8	1.	9		
General merchandise stores		53 13		8.3 4.9	1.9	- 1		3.0	4.8	1.8				
Food stores			3.6 3.7	4.3	1.8			2.5	4.2	1.7				
Grocery stores	1 2		5.8	4.5	1.9	9 1		2.5	4.4	1.9 0.9				
Automotive dealers and service stations New and used car dealers			0.1	2.5	0.9	• i		1.5	2.4	0.9				
Rew and used car dealers Gasoline service stations	5		7.7	1.0	0.5			0.5 0.5	0.7	0.2	_			
Apparel and accessory stores			5.5	0.8	0.0 0.0	-		0.9	1.7	0.8	0.	.5		
Furniture and homefurnishings stores			5.7 7.3	1.7	3.	-			10.4	3.3		.0		
Eating and drinking places	Į.		1.2	2.6	1.	~ I		1.4	2.5	1.2	0	.8		
Miscellaneous retail			ļ	-				1.3	2.7	1.6	1	.1		
Finance, insurance, and real estate		20	1.8	3.1	1.					0.2	1	.2		
Depository institutions			2.8	0.6	0. 0.			0.3 0.2	0.5 0.5	0.3	3 0	.2		
Insurance carriers	- 1		2.2	0.6 1.5				0.6	1.5	0.9	9 0).6		
Real estate			39.5	l		<u> </u>	·	1.5	39.9	19.8	3 9	9.5		
Services		1,19	97.4	42.4		·		1		1.:		0.5		
Hotels and other lodging places		70	37.4	2.8	1	.2	0.5	1.6	2.7	١	١ ١	J		

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999 - Continued

(In thousands)			Ir	juries and	l Ilinesses			Injur	ies	
	210	1999 Annual		Lost wo		Cases		Lost workday cases		Cases
Industry ¹	SIC code ²	average employ- ment ³ (000's)	Total cases	Total ⁴ away from work		without lost work- days	Total cases	Total ⁴	With days away from work ⁵	without lost work- days
Personal services Laundry, cleaning, and garment services Auto repair, services, and parking Automotive repair shops Automotive services, except repair Miscellaneous repair services Amusement and recreation services Health services Nursing and personal care facilities Hospitals Educational services Colleges and universities Social services	72 721 75 753 754 76 79 80 805 806 822 822	44.0 15.3 40.2 23.4 10.4 13.7 56.1 353.9 47.8 169.1 37.5 15.3	0.9 0.8 2.1 1.1 0.6 1.0 2.4 17.2 5.3 10.0 0.4	1.3 9.1 3.4 5.0 0.2 0.1	0.3 0.2 0.5 0.2 0.3 0.2 0.6 4.2 1.3 - 0.2 0.1	0.4 0.3 1.2 0.6 0.3 0.5 1.1 8.1 1.9 5.0 0.4 0.3 2.2	0.6 0.4	0.1	-	7.2 1.7 4.3 0.4 0.3
State and local government	1	550.1	27.0	13.9	8.9	13.1	25.3	13.1	8.2	12.1
State government		139.1	6.0	3.4	2.1	2.6	5.4	3.1	1.9	2.2
Services		90.4	3.2	1.8	0.9	1.4	2.9	1.6	0.8	1.2
Educational services Social services	82 83							1	L	1
Public administration		48.7	2.8	1.6	1.2	1.2	2.5	1.5	1.1	1.0
Justice, public order, and safety Administration of human resources Administration of economic programs	92 94 96	8.9	0.2	0.1	-	0.1	-	0.1	-	0.1
Local government		411.0	21.0	10.5	6.8	10.4	19.9	10.0	6.3	9.9
Construction		5.6	0.8	0.4	0.3	0.5	0.7	0.3	0.2	0.4
Services		269.4	10.	4.9	3.1	5.5	10.1	4.7	2.9	1
Nursing and personal care facilities Hospitals Educational services Elementary and secondary schools	805 806 81 82	14.5 2 247.5	1. 8.	0.6 4 3.6	0.4 5 2.2	0.5 2 4.8	1.0 3 8.2	0.5	0.4 5 2.1	0.5 4.7

Table 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1999 - Continued

(In thousands)

Michigan

			l:	njuries an	d Ilinesse	s	Injuries				
Industry ¹		1999 Annual average employ- ment ³ (000's)			Lost workday cases			Lost workday cases		Cases	
			Total cases	Total ⁴	With days away from work ⁵	without lost work- days	Total cases	Total⁴	With days away from work ⁵	without lost work- days	
Public administration Executive, legislative, and general Administration of human resources	91 94		8.4	4.5	2.9	3.9	8.0				

¹ Totals include data for industries not shown separately.

mining contractors are excluded from the coal, metal, and nonmetal mining industries.

NOTE: Because of rounding, components may not add to totals. n.e.c. = not elsewhere classified.

-- Indicates data not available.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses, in cooperation with participating State agencies.

² Standard Industrial Classification Manual, 1987 Edition.

³ Employment is expressed as an annual average and is derived primarily from the BLS-State Covered Employment and Wages program.

⁴ Total lost workday cases involve days away from work, or days of restricted work activity, or both.

⁶ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

⁶ Excludes farms with fewer than 11 employees.

⁷ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent

⁸ Fewer than 50 cases.